What is claimed is:

1. A protective film protecting a dielectric layer of a plasma display panel from discharge, containing metallic oxide, and a volume resistivity of said protective film being 3.5×10^{11} $\Omega \cdot cm$ or more.

2. The protective film according to claim 1, containing 3 hydrogen atoms or more when the number of total atoms in said protective film is defined as 100.

3. A protective film protecting a dielectric layer of a plasma display panel from discharge, containing metallic oxide and hydrogen, the number of hydrogen atoms being 3 or more when the number of total atoms in said protective film is defined as 100.

4. The protective film according to claim 1, wherein said metallic oxide is MgO.

5. The protective film according to claim 3, wherein said metallic oxide is MgO.

6. The protective film according to claim 4, wherein a peak of light emission intensity of light emitting center in 510 to 560 nm in a cathode luminescence is higher than that of light emission intensity of light emitting center in 280 to 440 nm or 680 to 760 nm.

7. The protective film according to claim 5, wherein a peak of light emission intensity of light emitting center in 510 to 560 nm in a cathode luminescence is higher than that of light emission intensity of light emitting center in 280 to 440 nm or 680 to 760 nm.

8. The protective film according to claim 6, wherein

the number of said hydrogen atoms is at least the number of total deficits of total oxygen atoms and metal atoms.

9. The protective film according to claim 7, wherein the number of said hydrogen atoms is at least the number of total deficits of total oxygen atoms and metal atoms.

10. The protective film according to claim 1, wherein said protective film is formed by means of performing a heat treatment in atmosphere including hydrogen in excited or ionized state.

11. The protective film according to claim 3, wherein said protective film is formed by means of performing a heat treatment in atmosphere including hydrogen in excited or ionized state.

12. The protective film according to claim 1, wherein a surface roughness Ra of said protective film is 5 nm or more.

13. The protective film according to claim 3, wherein a surface roughness Ra of said protective film is 5 nm or more.

14. The protective film according to claim 1, wherein said protective film has (111) orientation.

15. The protective film according to claim 3, wherein said protective film has (111) orientation.

16. A method of forming a protective film protecting a dielectric layer of a plasma display panel from discharge, comprising the steps of:

forming a metallic oxide film; and

performing a heat treatment of said metallic oxide

film in atmosphere including hydrogen in excited or ionized state.

17. A method of forming a protective film protecting a dielectric layer of a plasma display panel from discharge, comprising the step of:

forming a film containing a metallic oxide while performing a heat treatment in atmosphere including hydrogen in excited or ionized state.

18. A plasma display panel, comprising

a protective film according to claim 1.

19. A plasma display panel, comprising

a protective film according to claim 3.

20. A method of manufacturing a plasma display panel, comprising the step of:

forming a protective film by the method according to claim 16.

21. A method of manufacturing a plasma display panel, comprising the step of:

forming a protective film by the method according to claim 17.